09/581,772

Set	Items	Description
S1	306	AU="O'HAGAN D" OR AU="O'HAGAN D." OR AU="O'HAGAN DEREK" OR AU="O'HAGAN DEREK T"
S2	2	AU="O'HAGAN DEREK THOMAS"
S3	7672	AU="SINGH M"
S4	1575	AU="SINGH M."
S5	865	AU="OTT G"
S6	236	AU="OTT G."
S7	33	AU="OTT GARY"
S8	21	AU="BARACKMAN J" OR AU="BARACKMAN JOHN"
S9	53	AU="KAZZAZ J" OR AU="KAZZAZ J." OR AU="KAZZAZ JINA"
S10	10589	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9
S11	37650	MICROPARTICLE? ?
S12	170	S10 AND S11
S13	9487	POLY(5N)HYDROXY(W)ACID
S14	1088	POLYHYDROXY(W)BUTYRIC(W)ACID
S15	18948	POLYCAPROLACTONE
S16	717	POLYORTHOESTER
S17	3760	POLYANHYDRIDE
S18	594	POLYCYANOACRYLATE
S19	6632	POLY(2N)L(W)LACTIDE
S20	14706	POLY(5N)LACTIDE
S21	7571	POLY(5N)LACTIDE(5N)GLYCOLIDE
S22	33111	S13 OR S14 OR S15 OR S16 OR S17 OR S18
S23	14870	S19 OR S20 OR S21
S24	72	S12 AND (S22 OR S23)
S25	27	S24 NOT PY>1997
S26	15	RD (unique items)
S27	1375	S11 AND S22
S28	360	S27 NOT PY>1997
S29	358	RD (unique items)
S30	2161	S11 AND S23
S31	742	S30 NOT PY>1997
S32	467	RD (unique items)
S33	90648	POLYNUCLEOTIDE? ?
S34	728158	NUCLEIC(W)ACID
S35	3736447	DNA
S36	4089743	S33 OR S34 OR S35
S37	604	S11 AND S30 AND S36
S38	101	S37 AND S32
S39	101	RD (unique items)
S40	366065	ADJUVANT? ?
S41	39	S39 AND S40
S42	2161	S30 OR S32
S43	604	S42 AND S36
S44	0	S HUMAN(W)IMMUNODEFICIENCY(W)VIRUS
S45	634832	HIV
S46	634682	S44 OR S45
S47	35438	GP120
S48	5909	GP(W)120
S49	638560	S46 OR S47
S50	1711	GP(W)160
S51	9432	GP160
S52	1226	P24(W)GAG
S53	796	P24GAG
S54	356	P55(W)GAG
S55	185	P55GAG
S56	222	S43 AND S46
S57	640347	S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55
S58	14	S6 AND S57
S59	3	S58 NOT PY>1997
S60	30	S56 NOT PY>1997
S61	29	RD (unique items)
S62	554	S42 AND S40
S63	0	ALUMINU,

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S64	1828287	ALUMINUM
S65	198	S62 AND S64
S66	175	S62(S)S64
S67	14	S66 NOT PY>1996
S68	14	RD (unique items)
S69	105140	S57 AND S46 AND S36
S70	1764	S11 AND S69
S71	296	S70 AND (S47 OR S48)
S72	66	S71 NOT PY>1997
S73	65	RD (unique items)
S74	2671	HEXADECYLTRIMETHYLAMMONIUM(W)BROMIDE
S75	170943	SODIUM(W)DODECYL(W)(SULFATE OR SULPHATE)
S76	8	S42 AND S74
S77	83	S42 AND S75
S78	3	S76 AND S77
S79	13	S11 AND S40 AND S74
S80	5	S79 NOT S76
S81	0	S39 AND S74
S82	117	S40 AND S74
S83	38	S11 AND S74
S84	1172	S11 AND S75
S85	20	S83 AND S84
S86	10	S85 NOT PY>1997
S87	10	RD (unique items)
S88	18	S83 NOT S85
S89	4	S88 NOT PY>1997
S90	4	RD (unique items)
S91	83	S75 AND S42

?

26/3,AB/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09163368 97166574 PMID: 9014294
Synthetic peptides entrapped in microparticles **can elicit cytotoxic T cell activity.**
Nixon DF; Hioe C; Chen PD; Bian Z; Kuebler P; Li ML; Qiu H; Li XM; **Singh M** ; Richardson J; McGee P; Zamb T; Koff W; Wang CY; **O'Hagan D**
United Biomedical Inc., Hauppauge, NY 11788, USA.
Vaccine (ENGLAND) Nov 1996, 14 (16) p1523-30, ISSN 0264-410X Journal Code: X60
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Peptides from Plasmodium berghei circumsporozoite protein (CS) and influenza A virus nucleoprotein (NP) were entrapped in **microparticles** prepared from **poly** (**lactide** -co- **glycolide**) polymers, and the **microparticles** were administered parenterally to mice. After immunization with single or multiple doses, splenocytes were tested for a cytotoxic T cell (CTL) response and high levels of CTL activity were detected. The CTL induced were CD8+, MHC class I restricted, and could recognize virus infected cells. Peptide entrapped in **microparticles** of mean size < 500 nm were better inducers of CTL than larger **microparticles** (mean > 2 microns and above). **Microparticles** could also be used to deliver lipid modified peptides (lipopeptides) and elicited higher levels of cytolytic activity than either free peptide in **microparticles** or lipopeptide alone. **Microparticles** provide a novel way of inducing a CTL response using synthetic peptides.

26/3,AB/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08711252 96164474 PMID: 8578845
Synthetic delivery system for tuberculosis vaccines: immunological evaluation of the M. tuberculosis 38 kDa protein entrapped in biodegradable PLG microparticles .
Vordermeier HM; Coombes AG; Jenkins P; McGee JP; O'Hagan DT; Davis SS; **Singh M**
MRC Clinical Sciences Centre, Hammersmith Hospital, London, UK.
Vaccine (ENGLAND) Nov 1995, 13 (16) p1576-82, ISSN 0264-410X Journal Code: X60
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Tuberculosis remains a major public health burden which could be ameliorated by effective and well-defined subunit vaccines, particularly because the protective efficacy of current M. bovis BCG vaccines is both unpredictable and variable. The immunodominant 38 kDa antigen from Mycobacterium tuberculosis was entrapped in biodegradable **poly** (DL- **lactide** co- **glycolide**) (PLG) **microparticles** which served as a delivery system. Both cellular and humoral immune responses were assessed and compared with those obtained after immunization with the 38 kDa protein emulsified in incomplete Freund's adjuvant (IFA). Vaccination of mice with a single dose of antigen-loaded **microparticles** resulted in specific IgG titres peaking after five weeks comparable to those achieved after vaccination with protein emulsified in incomplete Freund's adjuvant (IFA). T-cell responses were found to be superior to those induced with antigen/IFA. The T- and B-cell epitope specificities ad judged with synthetic peptides were identical following immunization with antigen in **microparticles** or IFA. Differences in adjuvanticity were revealed by measuring antigen-specific IgG1, IgG2a and antigen-induced IFN-gamma secretion in vitro: substantially higher titres of IgG2a were observed following immunization with antigen/ **microparticles** than with 38 kDa protein/IFA. This was paralleled by a tenfold higher secretion of IFN-gamma

in mice injected with antigen/ **microparticles** . Reduction in colony-forming units was not consistent in mice immunized with 38 kDa protein entrapped in **microparticles** which were subsequently infected with live tubercle bacilli. Taken together these results indicate that biodegradable PLG **microparticles** constitute a favorable candidate vaccine delivery system worthy of further assessment in the quest to develop better and defined agents protecting against tuberculosis.

26/3,AB/4 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

10840664 BIOSIS NO.: 199799461809
Recent advances in vaccine adjuvants: The development of MF59 emulsion and polymeric microparticles .
AUTHOR: **O'Hagan Derek T** ; Ott Gary S; Van Nest Gary
AUTHOR ADDRESS: Chiron Corp., 4560 Horton St., Emeryville, CA 94704**USA
JOURNAL: Molecular Medicine Today 3 (2):p69-75 1997
ISSN: 1357-4310
DOCUMENT TYPE: Literature Review
RECORD TYPE: Citation
LANGUAGE: English
1997

26/3,AB/5 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

10198978 BIOSIS NO.: 199698653896
Immunization with a soluble recombinant HIV protein entrapped in biodegradable microparticles **induces HIV-specific CD8+ cytotoxic T lymphocytes and CD4+ Th1 cells.**
AUTHOR: Moore Anne; McGuirk Peter; Adams Susan; Jones Wendy C; McGee J Paul ; **O'Hagan Derek T** ; Mills Kingston H G(a
AUTHOR ADDRESS: (a)Infection Immunity Lab., Biol. Dep., St. Patricks College, Maynooth, Co. Kildare**Ireland
JOURNAL: Vaccine 13 (18):p1741-1749 1995
ISSN: 0264-410X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: One of the major obstacles to the development of successful recombinant vaccines against human immunodeficiency virus (HIV) and other intracellular pathogens is the identification of a safe and effective vaccine delivery system for the induction of cell mediated immunity with soluble protein antigens. In this study it was demonstrated that immunization with a recombinant HIV envelope (env) protein entrapped in biodegradable **poly (lactide** -co- **glycolide**) (PLG) **microparticles** induced consistent HIV-specific CD4+ and CD8+ T-cell responses in mice. Major histocompatibility complex (MHC) class I-restricted cytotoxic T lymphocytes (CTL) responses were detected following a single systemic immunization with gp120 entrapped **microparticles** and when given by the intranasal (i.n.) route induced HIV-specific CD8+ CTL and secretory IgA. Furthermore immunization with gp120 entrapped in **microparticles** generated CD4+ T cells that secreted moderate to high levels of IFN-gamma. Therefore, PLG **microparticles** are a safe and effective means of delivering antigen to the appropriate processing site for the generation of class I-restricted CTL, and are also capable of inducing Th1 cells.

1995

26/3,AB/6 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09866921 BIOSIS NO.: 199598321839
Cholera toxin B subunit (CTB) entrapped in microparticles **shows comparable immunogenicity to CTB mixed with whole cholera toxin following oral immunization.**
AUTHOR: **O'Hagan Derek T** (a); McGee J Paul; Lindblad Marianne; Holmgren Jan
AUTHOR ADDRESS: (a)United Biomed. Inc., 25 Davids Dr., Hauppauge, NY 11788 **USA
JOURNAL: International Journal of Pharmaceutics (Amsterdam) 119 (2):p 251-255 1995
ISSN: 0378-5173
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Cholera toxin B subunit (CTB) was entrapped in **poly** (**lactide** -co- **glycolide**) **microparticles** and the responses induced by microencapsulated CTB were comparable to those induced by oral immunization with CTB mixed with whole cholera toxin. In addition, the CTB was released from **microparticles** intact following in vitro incubation, as determined by the ability of the CTB to bind to its cellular receptor, GM1. Moreover, microencapsulated CTB induced serum antibodies against intact CTB and not against monomeric fragments.

1995

26/3,AB/8 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09863070 BIOSIS NO.: 199598317988
Zero order release of protein from poly **(D,** L - lactide **-co-** glycolide) microparticles **prepared using a modified phase separation technique.**
AUTHOR: McGee J Paul; Davis Stanley S(a); **O'Hagan Derek T**
AUTHOR ADDRESS: (a)Dep. Pharmaceutical Sciences, University Nottingham, Nottingham NG7 2RD**UK
JOURNAL: Journal of Controlled Release 34 (2):p77-86 1995
ISSN: 0168-3659
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The paper describes the preparation of **poly** (D, **L** - **lactide** -co- **glycolide**) and **poly** (D, **L** - **lactide**) **microparticles** with an entrapped protein using an adaptation of an existing phase separation technique. The effects of variations in **microparticle** preparation parameters such as the volume and concentration of polymer solution, the effect of different polymers and solvents, and the effect of non-ionic surfactants on the size, quality and loading level of the **microparticles** has been investigated. In vitro release studies were undertaken on selected batches of **microparticles** . The studies showed a small initial release of entrapped protein over the first 12 h, with the subsequent release profile appearing to follow zero order kinetics for **microparticles** with low levels of entrapped protein.

1995

26/3,AB/10 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

08857187 BIOSIS NO.: 199396008688
The preparation and characterization of poly (lactide -**co**- glycolide) microparticles : **II. The entrapment of a model protein using a (water-in-oil)-in-water emulsion solvent evaporation technique.**
AUTHOR: Jeffery Hayley; Davis Stanley S; **O'Hagan Derek T** (a
AUTHOR ADDRESS: (a)Dep. of Pharmaceutical Sci., Univ. Nottingham, Nottingham NG7 2RD, England**UK
JOURNAL: Pharmaceutical Research (New York) 10 (3):p362-368 1993
ISSN: 0724-8741
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: **Poly** (**lactide** -co- **glycolide**) (PLG) **microparticles** with entrapped antigens have recently been investigated as controlled-release vaccines. This paper describes the preparation of PLG **microparticles** with an entrapped model antigen, ovalbumin (OVA), using a (water-in-oil)-in-water emulsion solvent evaporation technique. In a series of experiments, the effects of process parameters on particle size and OVA entrapment were investigated. It was found that smooth, spherical **microparticles** 1-2 mu-m in diameter containing up to 10% (w/w) OVA could be produced using a small volume of external aqueous phase containing a high concentration of emulsion stabilizer and a 1:5 antigen:polymer ratio. PAGE analysis, isoelectric focusing, and Western blotting of OVA released from the **microparticles** in vitro confirmed that the molecular weight and antigenicity of the protein remained largely unaltered by the entrapment procedure.

1993

26/3,AB/15 (Item 1 from file: 654)
DIALOG(R)File 654:US PAT.FULL.

02621127
Utility
PREPARATION OF **MICROPARTICLES** AND METHOD OF IMMUNIZATION
[Dispersing bioactive material in oil medium which is nonsolvent for pharmaceutically acceptable polymer, adding said polymer dissolved in second medium, mixing to form **microparticles**]

PATENT NO.: 5,603,960
ISSUED: February 18, 1997 (19970218)
INVENTOR(s): **O'Hagan** , Derek T., 16 Middlesex Rd., Bootle, Merseyside L20 9BW, GB (United Kingdom)
McGee, John P., Tanjong Kilmarnack Rd., Kilmaurs, Strathelyde KA3 2RB, GB (United Kingdom).Scotland
Davis, Stanley S., 19 Cavendish Crescent North, Nottingham NG7 1BA, GB (United Kingdom
[Assignee Code(s): 68000]
EXTRA INFO: Assignment transaction [Reassigned], recorded August 19, 1997 (19970819)
APPL. NO.: 8-374,751
FILED: June 02, 1995 (19950602)
PRIORITY: 9310781, GB (United Kingdom), May 25, 1993 (19930525)
PCT: PCT-US94-05834 (WO 94US5834)
Section 371 Date: June 02, 1995 (19950602)
Section 102(e) Date: June 02, 1995 (19950602)
Filing Date: May 24, 1994 (19940524)
Publication Number: WO94-27718 (WO 9427718)
Publication Date: December 08, 1994 (19941208)

FULL TEXT: 705 lines

ABSTRACT

The present invention describes a method for producing **microparticles** useful in the formulation of pharmaceutical compositions. The present invention further describes a method of immunizing a mammal against diseases comprising administering to a mammal an effective amount of antigen containing **microparticles** . In particular, the present invention describes a method of potentiating an immune response in a mammal comprising administering an effective amount of a pharmaceutical composition to a mammal. The present invention further describes a vaccine comprising a pharmaceutical composition containing said **microparticles** . An antigen delivery system comprising **microparticles** containing entrapped antigens is further described by the present invention. A pharmaceutical composition comprising **microparticles** and a pharmaceutical carrier is also provided.
?

41/3,AB/2 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

05140547 Genuine Article#: VC790 Number of References: 116
Title: NASAL DELIVERY OF VACCINES (Abstract Available)
Author(s): ALMEIDA AJ; ALPAR HO
Corporate Source: UNIV LISBON,FAC FARM,UNIDADE CIENCIAS & TECNOL FARMACEUT,AV FORCAS ARMADAS/P-1600 LISBON//PORTUGAL/; UNIV LISBON,FAC FARM,UNIDADE CIENCIAS & TECNOL FARMACEUT/P-1600 LISBON//PORTUGAL/; ASTON UNIV,INST PHARMACEUT SCI/BIRMINGHAM B4 7ET/W MIDLANDS/ENGLAND/
Journal: JOURNAL OF DRUG TARGETING, 1996, V3, N6, P455-467
ISSN: 1061-186X
Language: ENGLISH Document Type: REVIEW
Abstract: Only relatively recently the significance of inducing not only systemic immunity but also significant local immunity at susceptible mucosal surfaces has become appreciated. A new field of mucosal immunity has been established as information accumulates on mucosal-associated lymphoid tissue (MALT) and on its role in both local and systemic immune responses. This review describes the formulation of vaccines to be delivered to one of MALT components, i.e. the nasal-associated lymphoid tissue (NALT), which bears some similarities with the Peyer's patches of the intestine. The association of antigens with **adjuvants** and particulate carriers such as **microparticles** , nanoparticles and liposomes is emphasised.

41/3,AB/3 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00653535
Methods for administering biological agents and microparticle **compositions useful in these and other methods.**
Verfahren zur Verabreichung biologischer Stoffe sowie Mikropartikeln zur Verwendung in diesen und weiteren Verfahren.
Procedes pour l'administration d'agents biologiques et microparticules utilisables dans ces procedes et autrui.
PATENT ASSIGNEE:
ELI LILLY AND COMPANY, (204942), Lilly Corporate Center, Indianapolis Indiana 46285, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;NL;PT;SE)
INVENTOR:
Craft, Libbey Sue, 10325 Kiowa Drive, Indianapolis, Indiana 46236, (US)
Ferguson, Thomas Harry, 1810 East Main, Greenfield, Indiana 46140, (US)
Heiman, Mark Louis, 5740 Susan Drive East, Indianapolis, Indiana 46250, (US)
Thompson, William Webster, 5521 Overbrook Circle, Indianapolis, Indiana 46226-1542, (US)
LEGAL REPRESENTATIVE:
Tapping, Kenneth George et al (52302), Lilly Industries Limited European Patent Operations Erl Wood Manor, Windlesham Surrey GU20 6PH, (GB)
PATENT (CC, No, Kind, Date): EP 628307 A2 941214 (Basic)
APPLICATION (CC, No, Date): EP 94303655 940523;
PRIORITY (CC, No, Date): US 68413 930527; US 168941 931216
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; NL; PT; SE
INTERNATIONAL PATENT CLASS: A61K-009/16;

ABSTRACT EP 628307 A2
A method for administering biological agents to eggs is disclosed which comprises providing the agents in a particulate carrier and injecting the carrier into the air cells of the eggs. The egg is preferably maintained in a vertical position with the air cell on top to facilitate migration of the particulate carrier between the inner and outer membranes which

define the air cell, to the lower end of the egg. The particulate carrier releases the biological agent to the surrounding fluid and blood vessels. In addition, the carrier is embodied in the bird upon hatching from the egg, and therefore is available to continue to release the biological agent to the bird posthatch.

Also disclosed is a composition of polyester **microparticles** containing bioactive polypeptide agents and methods for preparing the composition and administering bioactive agents. The composition comprises biocompatible, biodegradable **microparticles** having a polyester matrix and from about 5% to about 25% by weight of a biologically active, water-soluble polypeptide dispersed throughout the matrix, the polypeptide selected fom the group consisting of growth hormone releasing factor, synthetic analogs of growth hormone releasing factor, and pharmacologically active fragments thereof. The method for preparing the composition includes dissolving polyester in an organic solvent; suspending a biologically active agent in the polyester solution; emulsifying the suspension into an aqueous medium in which the agent is insoluble and evaporating the solvent from the emulsion to produce **microparticles** . The method for administering a bioactive agent to an organism involves suspending the **microparticles** in a suitable liquid and injecting the organism.

ABSTRACT WORD COUNT: 257

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	349
SPEC A	(English)	EPABF2	11357
Total word count - document A			11706
Total word count - document B			0
Total word count - documents A + B			11706

41/3,AB/4 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

00558023

ORAL DELIVERY SYSTEMS FOR MICROPARTICLES
SYSTEME ZUR ORALEN FREISETZUNG VON MIKROPARTIKELN
SYSTEMES DE LIBERATION ORALE DE MICROPARTICULES

PATENT ASSIGNEE:
BIOTECH AUSTRALIA PTY. LIMITED, (1387311), 28 Barcoo Street, East Roseville, NSW 2069, (AU), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;MC;NL;SE)

INVENTOR:
RUSSELL-JONES, Gregory, John, 23 Greenfield Avenue, Middle Cove, NSW 2068, (AU)
WESTWOOD, Steven, William, 6/98 Alt Street, Ashfield, NSW 2131, (AU)

LEGAL REPRESENTATIVE:
Schlich, George William (75591), Mathys & Squire 100 Grays Inn Road, London WC1X 8AL, (GB)

PATENT (CC, No, Kind, Date): EP 531497 A1 930317 (Basic)
EP 531497 A1 931222
EP 531497 B1 970813
WO 9217167 921015

APPLICATION (CC, No, Date): EP 92908034 920402; WO 92AU141 920402

PRIORITY (CC, No, Date): AU 915385 910402

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; MC; NL; SE

INTERNATIONAL PATENT CLASS: A61K-009/50; A61K-009/52; A61K-047/24; A61K-047/42; A61K-047/46; A61K-047/48;

NOTE:
No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9708W2	785
CLAIMS B	(German)	9708W2	802
CLAIMS B	(French)	9708W2	973
SPEC B	(English)	9708W2	8706
Total word count - document A			0
Total word count - document B			11266
Total word count - documents A + B			11266

41/3,AB/13 (Item 9 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

00338219

DIRECT ADMINISTRATION OF GENE DELIVERY VEHICLES AT MULTIPLE SITES
ADMINISTRATION DIRECTE EN PLUSIEURS SITES DE VEHICULES DISTRIBUTEURS DE GENES

Patent Applicant/Assignee:
CHIRON VIAGENE INC,
Inventor(s):
IRWIN Michael J,
WARNER John F,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9620731 A1 19960711
Application: WO 95US16471 19951215 (PCT/WO US9516471)
Priority Application: US 94366784 19941230
Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG UZ VN KE LS MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 16955

English Abstract
Methods of stimulating an immune response, either humoral or cell-mediated, in a warm-blooded animal through the administration at multiple sites of one or more gene delivery vehicles is provided. Each of the gene delivery vehicles directs the expression of at least one substance in host cells modified with the vehicle, such that an immune response is generated. Within preferred embodiments, the expressed substance elicits a cell-mediated immune response, preferably an HLA Class I-restricted immune response.

French Abstract
Methodes de stimulation d'une reponse immunitaire humorale ou cellulaire chez un animal a sang chaud par administration en plusieurs sites d'un ou plusieurs vehicules distributeurs de genes. Chacun de ces vehicules dirige l'expression d'au moins une substance dans des cellules hotes modifiees avec le vehicule de maniere a provoquer une reponse immunitaire. Dans les variantes preferees, la substance exprimee emet une reponse immunitaire induite par la cellule et de preference une reponse immunitaire par HLA restreinte a la categorie I.

41/3,AB/14 (Item 10 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

00338186

SURFACE-MODIFIED NANOPARTICLES AND METHOD OF MAKING AND USING SAME
NANOPARTICULES A MODIFICATION DE SURFACE ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION

Patent Applicant/Assignee:
THE BOARD OF REGENTS acting for and on behalf of THE UNIVERSITY OF MICHIGAN,

LEVY Robert J,
LABHASETWAR Vinod D,
SONG Cunxian S,
Inventor(s):
LEVY Robert J,
LABHASETWAR Vinod D,
SONG Cunxian S,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9620698 A2 19960711
Application: WO 96US476 19960104 (PCT/WO US9600476)
Priority Application: US 95369541 19950105; US 95389893 19950216
Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN KE LS MW SD SZ UG AZ BY KZ RU TJ TM AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 33623

English Abstract

Biodegradable controlled release nanoparticles as sustained release bioactive agent delivery vehicles include surface modifying agents to target binding of the nanoparticles to tissues or cells of living systems, to enhance nanoparticle sustained release properties, and to protect nanoparticle-incorporated bioactive agents. Unique methods of making small (10 nm to 15 nm, and preferably 20 nm to 35 nm) nanoparticles having a narrow size distribution which can be surface-modified after the nanoparticles are formed is described. Techniques for modifying the surface include a lyophilization technique to produce a physically adsorbed coating and epoxy-derivatization to functionalize the surface of the nanoparticles to covalently bind molecules of interest. The manoparticles may also comprise hydroxy-terminated or epoxide-terminated and/or activated multiblock copolymers, having hydrophobic segments which may be polycaprolactone and hydrophilic segments. The nanoparticles are useful for local intravascular administration of smooth muscle inhibitors and antithrombogenic agents as part of interventional cardiac or vascular catheterization such as a balloon angioplasty procedure; direct application to tissues and/or cells for gene therapy, such as the delivery of osteotropic genes or gene segments into bone progenitor cells; or oral administration in an enteric capsule for delivery of protein/peptide based vaccines.

French Abstract

Ces nanoparticules biodegradables a liberation lente, utilisees comme vehicules d'apport d'agents bioactifs a liberation prolongee, comprennent des agents de modification de surface qui assurent la liaison ciblee des nanoparticules avec des tissus ou des cellules de systemes vivants, ameliorent les proprietes de liberation prolongee des nanoparticules et protegent les agents bioactifs incorpores dans lesdites nanoparticules. L'invention concerne egalement des procedes uniques de fabrication de nanoparticules de faibles dimensions (de 10 nm a 50 nm, de preference de 20 nm a 35 nm), et presentant une repartition granulometrique etroite, qui peuvent etre modifiees en surface apres leur formation. Les techniques visant a modifier la surface des nanoparticules comprennent une technique de lyophilisation permettant de produire un enrobage adsorbe physiquement et une derivation avec epoxy permettant de fonctionnaliser la surface des nanoparticules de sorte qu'elles puissent lier de facon covalente des molecules importantes. Ces nanoparticules peuvent egalement comprendre des copolymeres multisequences a activation et/ou terminaison epoxyde ou hydroxy, presentant des segments hydrophobes qui peuvent etre des segments de polycaprolactone ou hydrophiles. Elles conviennent a l'administration locale intravasculaire d'inhibiteurs des muscles lisses et d'agents antithrombogenes dans le cadre d'une intervention de sondage vasculaire ou cardiaque, telle qu'une procedure d'angioplastie a ballonnet; a une application directe sur des tissus

et/ou des cellules dans cadre de la therapie genique, par exemple l'apport de genes ou de segments de genes osteotropes dans les cellules osseuses souches; ou a l'administration par voie orale, dans une capsule entero-soluble destinee a l'apport de vaccins a base de proteines/peptides.

41/3,AB/15 (Item 11 from file: 349)

00337500

METHODS FOR PREPARING AND PURIFYING MACROMOLECULAR CONJUGATES
PROCEDES DE PREPARATION ET DE PURIFICATION DE CONJUGUES MACROMOLECULAIRES

Patent Applicant/Assignee:
MIDDLESEX SCIENCES INC,
Inventor(s):
DI Jie,
WOISZWILLO James E,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9620012 A2 19960704
Application: WO 95US16950 19951222 (PCT/WO US9516950)
Priority Application: US 94372820 19941223; US 95538817 19951004
Designated States: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 15988

English Abstract
Methods for the preparation and purification of conjugates by reacting a molecule containing an aldehyde group with a molecule containing an amine group in the presence of a polymer for a sufficient amount of time to form conjugate particles. Conjugates are prepared rapidly and efficiently by oxidizing the aldehyde and combining the oxidized aldehyde with a protein and polymer solution to form Schiff base intermediate conjugate particles in the absence of reductive amination. Subsequent separation of the particles from the conjugation reaction mixture yields purified conjugates that have been separated from the free, unconjugated components. Most preferably, the polymer is a polymer mixture comprising polyvinylpyrrolidone and polyethylene glycol. An organic solvent, such as an alcohol may be added to the incubation mixture to facilitate particle formation. A conjugating agent may also be included in the reaction mixture. The particles may be washed for removal of additional undesired contaminants and solubilized with a base, yielding soluble conjugates. Conjugates prepared from one or more antigens are suitable for use as a vaccine when administered to humans or animals.

French Abstract
Procedes de preparation et de purification de conjugues par reaction d'une molecule contenant un groupe aldehyde avec une molecule contenant un groupe amine en presence d'un polymere pendant une duree suffisante pour obtenir des particules de conjugues. On prepare les conjugues rapidement et efficacement par oxydation de l'aldehyde et par combinaison de l'aldehyde oxyde avec une solution a base de proteines et de polymere, afin d'obtenir des particules de conjugues intermediaires de base de Schiff en l'absence d'une animation reductrice. La separation subsequente des particules du melange reactionnel de conjugaison permet d'obtenir des conjugues purifies qu'on a separe des constituants libres non conjugues. De preference, le polymere est un melange de polymeres comprenant polyvinylpyrrolidone et polyethylene glycol. On peut ajouter un solvant organique, tel qu'un alcool, au melange d'incubation, afin de faciliter la formation des particules. On peut egalement ajouter un agent de conjugaison au melange reactionnel. On peut laver les particules afin de supprimer les contaminants supplementaires indesirables et les solubiliser au moyen d'une base, ce qui produit des conjugues solubles. Les conjugues prepares a partir d'un ou plusieurs antigenes sont utiles en tant que vaccins quand on les administre a l'homme ou a l'animal.

41/3,AB/18 (Item 14 from file: 349)

00321470

SOLID DELIVERY SYSTEMS FOR CONTROLLED RELEASE OF MOLECULES INCORPORATED THEREIN AND METHODS OF MAKING SAME

SYSTEMES D'ADMINISTRATION DE SUBSTANCES SOLIDES, POUR LA LIBERATION CONTROLEE DE MOLECULES INCORPOREES DANS CES SUBSTANCES ET PROCEDES DE FABRICATION DE CES SYSTEMES

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Patent and Priority Information (Country, Number, Date):
Patent: WO 9603978 A1 19960215
Application: WO 95GB1861 19950804 (PCT/WO GB9501861)
Priority Application: GB 9415810 19940804; US 94349029 19941202
Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 20654

English Abstract

The present invention encompasses solid dose delivery systems for administration of guest substances. Preferred delivery systems are suitable for delivery of bioactive materials to subcutaneous and intradermal, intramuscular, intravenous tissue, the delivery system being sized and shaped for penetrating the epidermis. The delivery systems comprise a vitreous vehicle loaded with the guest substance and capable of releasing the guest substance in situ at various controlled rates. The present invention further includes methods of making and using the solid dose delivery systems.

French Abstract

Cette invention se rapporte a des systemes d'apport de doses de substances solides, qui servent a l'administration de substances hotes incorporees dans ces doses. Les systemes d'administration preferes de cette invention se pretent a l'apport de matieres bioactives dans des tissus intraveineux, intramusculaires, sous-cutanes et intradermiques, la taille et la forme de ce systeme d'apport etant concues pour lui permettre de penetrer dans l'epiderme. Ces systemes d'apport comprennent un excipient vitreux charge de la substance hote et capable de liberer cette substance hote in situ a divers taux controles. Cette invention se rapporte en outre a des procedes pour fabriquer et utiliser ces systemes d'administration de doses de substances solides.

41/3,AB/19 (Item 15 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

00316942
POLYMER MICROPARTICLES **FOR DRUG DELIVERY**
MICROPARTICULES DE POLYMERE DESTINEES A L'APPORT DES MEDICAMENTS
Patent Applicant/Assignee:
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COOMBES Alan Gerald Arthur,
JENKINS Paul George,
DAVIS Stanley Stewart,
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Patent and Priority Information (Country, Number, Date):
Patent: WO 9535097 A1 19951228
Application: WO 95GB1426 19950619 (PCT/WO GB9501426)
Priority Application: GB 9412273 19940618
Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 8833

English Abstract
The invention provides a **microparticle** comprising a mixture of a biodegradable polymer and a water soluble polymer, and an active agent. Preferred biodegradable polymers are **lactide** homopolymers or copolymers of **lactide** and **glycolide** . Preferred water soluble polymers are PEG (**poly** (ethylene glycol)) or PEG copolymers. The particles exhibit a linear release profile of active agent. The invention also provides an emulsion/solvent extraction method to make the **microparticles** . The continuous phase of the secondary emulsion contains an organic solvent which is miscible with the organic solvent in the primary emulsion.

French Abstract
Cette invention concerne une microparticule comprenant un melange forme d'un polymere biodegradable et d'un polymere soluble dans l'eau, et un agent actif. Les polymeres biodegradables preferes sont les homopolymeres de lactide ou les copolymeres de lactide et de glycolide. Les polymeres solubles dans l'eau preferes sont les polymeres de PEG (poly(ethylene glycol) ou les copolymeres de PEG. Ces particules presentent un profil de liberation lineaire de l'agent actif. Cette invention concerne egalement un procede d'extraction par solvant/emulsion pour former les microparticules. La phase continue de l'emulsion secondaire contient un solvant organique qui se melange avec le solvant organique present dans l'emulsion principale.

41/3,AB/20 (Item 16 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00306777
POLYMERIC GENE DELIVERY SYSTEM
SYSTEME DE LIBERATION DE GENES POLYMERES
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Inventor(s):
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JONG Yong Shik,
BOEKELHEIDE Kim,

Patent and Priority Information (Country, Number, Date):
  Patent: WO 9524929 A2 19950921
  Application: WO 95US3307 19950315 (PCT/WO US9503307)
  Priority Application: US 94668 19940315
Designated States: AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 9650

English Abstract
A means for obtaining efficient introduction of exogenous genes into a patient, with long term expression of the gene, is disclosed. The gene, under control of an appropriate promoter for expression in a particular cell type, is encapsulated or dispersed with a biocompatible, preferably biodegradable polymeric matrix, where the gene is able to diffuse out of the matrix over an extended period of time, for example, a period of three to twelve months or longer. The matrix is preferably in the form of a **microparticle** such as a microsphere (where the gene is dispersed throughout a solid polymeric matrix) or microcapsule (gene is stored in the core of a polymeric shell), a film, an implant, or a coating on a device such as a stent. The size and composition of the polymeric device is selected to result in favorable release kinetics in tissue. The size is also selected according to the method of delivery which is to be used, typically injection or administration of a suspension by aerosol into the nasal and/or pulmonary areas. The matrix composition can be selected to not only have favorable degradation rates, but to be formed of a material which is bioadhesive, to further increase the effectiveness of transfer when administered to a mucosal surface.

French Abstract
L'invention concerne un moyen efficace d'assurer l'introduction de genes exogenes dans un patient, avec une expression prolongee du gene. Le gene, sous le controle d'un promoteur approprie pour l'expression dans un type de cellule particulier, est encapsule ou disperse dans une matrice polymere biocompatibloe de preference biodegradable de laquelle le gene peut etre diffuse sur une periode prolongee, par exemple, une periode de trois a douze mois. La matrice se presente, de preference, sous la forme d'une microparticule telle qu'une microbille (ou les genes sont disperses dans une matrice polymere solide) ou de microcapsule (le gene est stocke dans le noyau d'une coquille polymere), de film, d'implant ou de revetement sur un dispositif tel qu'un drain. La taille et la composition du dispositif polymere sont selectionnees de sorte qu'une cinetique de liberation avantageuse soit obtenue dans le tissu. La taille est egalement choisie selon la methode de liberation a utiliser, generalement l'injection ou l'administration d'une suspension par un aerosol dans les regions nasales et/ou pulmonaires. On peut selectionner la composition de la matrice non seulement afin d'obtenir des vitesses de degradation rapides avantageuses, mais egalement afin de permettre la formation d'un materiau bioadhesif et d'augmenter encore l'efficacite du transfert lorsque ce dernier est applique sur une surface muqueuse.

41/3,AB/21 (Item 17 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00285208
BIODEGRADABLE PARTICLES
PARTICULES BIODEGRADABLES
Patent Applicant/Assignee:
  MASSACHUSETTS INSTITUTE OF TECHNOLOGY,
Inventor(s):
  GREF Ruxandra,
  MINAMITAKE Yoshiharu,
  LANGER Robert S,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9503357 A1 19950202

Application: WO [redacted]US8416 19940722 (PCT/WO US9408[redacted]16)
Priority Application: US 93370 19930723; US 94677 19940318
Designated States: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 10890

English Abstract
Particles are provided that are not rapidly cleared from the blood stream by the macrophages of the reticuloendothelial system, and that can be modified to achieve variable release rates or to target specific cells or organs. The particles have a biodegradable solid core containing a biologically active material and poly(alkylene glycol) moieties on the surface. The terminal hydroxyl group of the poly(alkylene glycol) can be used to covalently attach onto the surface of the particles biologically active molecules, including antibodies targeted to specific cells or organs, or molecules affecting the charge, lipophilicity or hydrophilicity of the particle. The surface of the particle can also be modified by attaching biodegradable polymers of the same structure as those forming the core of the particles. The typical size of the particles is between 1 nm and 1000 nm, preferably between 1 nm and 100 nm, although **microparticles** can also be formed as described herein. The particles can include magnetic particles or radiopaque materials, such as air and other gases, for diagnostic imaging, biologically active molecules to be delivered to a site, or compounds for targeting the particles. The particles have a prolonged half-life in the blood compared to particles not containing poly(alkylene glycol) moieties on the surface.

French Abstract
L'invention porte sur des particules qui ne sont pas rapidement eliminees du flux sanguin par les macrophages du systeme reticuloendothelial, et qui peuvent etre modifiees pour obtenir des taux de liberation variables ou pour viser des cellules ou organes specifiques. Les particles ont un noyau solide biodegradable contenant de la matiere biologiquement active et des fractions de poly(alkylene glycol) sur sa surface. Le groupe hydroxyle terminal du poly(alkylene glycol) permet la liaison covalente des molecules biologiquement actives sur la surface des particules, mais aussi des anticorps ayant pour cible des cellules ou organes specifiques, ou des molecules affectant la charge, la lipophilie ou l'hydrophilie de la particule. Il est aussi possible de modifier la surface de la particule en fixant des polymeres biodegradables de la meme structure que ceux qui constituent le coeur des particules. La taille type des particules est comprise entre 1 nm et 1000 nm, generalement entre 1 nm et 100 nm, encore que des microparticules peuvent aussi se constituer selon le processus decrit ci-dessus. Parmi les particules en question peuvent figurer des particules magnetiques ou des matieres radiopaques telles que l'air et d'autres gaz, utilisables pour l'imagerie diagnostique, des molecules biologiquement actives a delivrer sur un site, ou des composes ayant ces particules pour cible. Ces particules ont une demi-vie dans le sang prolongee par rapport aux particules ne comportant pas de fractions poly(alkylene glycol) en surface.

41/3,AB/28 (Item 24 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00219932
ORAL DELIVERY SYSTEMS FOR MICROPARTICLES
SYSTEMES DE LIBERATION ORALE DE MICROPARTICULES
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RUSSELL-JONES Gregory John,
WESTWOOD Steven William,
Inventor(s):

RUSSELL-JONES Gregory John,
WESTWOOD Steven William,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9217167 A1 19921015
Application: WO 92AU141 19920402 (PCT/WO AU9200141)
Priority Application: AU 915385 19910402
Designated States: AT AU BE CA CH DE DK ES FR GB GR IT JP KR LU MC NL SE US
Publication Language: English
Fulltext Word Count: 11423

English Abstract
There are disclosed complexes and compositions for oral delivery of a substance or substances to the circulation or lymphatic drainage system of a host. The complexes of the invention comprise a **microparticle** coupled to at least one carrier, the carrier being capable of enabling the complex to be transported to the circulation or lymphatic drainage system via the mucosal epithelium of the host, and the **microparticle** entrapping or encapsulating, or being capable of entrapping or encapsulating, the substance(s). Examples of suitable carriers are mucosal binding proteins, bacterial adhesins, viral adhesins, toxin binding subunits, lectins, Vitamin B12 and analogues or derivatives of Vitamin B12 possessing binding activity to Castle's intrinsic factor.

French Abstract
On decrit des complexes et des compositions concus pour liberer par voie orale une ou plusieurs substance(s) dans le systeme de circulation ou de drainage lymphatique d'un hote. Les complexes de l'invention comprennent une microparticule attachee a au moins un porteur, ledit porteur pouvant permettre le transport du compose dans le systeme de circulation ou de drainage lymphatique via l'epithelium de la muqueuse de l'hote, et la microparticule piegeant ou encapsulant, ou pouvant pieger ou encapsuler, ladite ou lesdites substance(s). On peut citer comme exemple de porteurs appropries les proteines de liaison des muqueuses, les adhesines bacteriennes, les adhesines virales, les sous-unites de liaison des toxines, les lectines, la vitamine B12 et les analogues ou derives de la vitamine B12 dotes d'une activite de liaison au facteur de Castle.

41/3,AB/35 (Item 7 from file: 654)
DIALOG(R)File 654:US PAT.FULL.

02593577
Utility
NANOPARTICLES AND **MICROPARTICLES** OF NON-LINEAR HYDROPHILIC-HYDROPHOBIC MULTIBLOCK COPOLYMERS
[Drug delivery]

PATENT NO.: 5,578,325
ISSUED: November 26, 1996 (19961126)
INVENTOR(s): Domb, Abraham J., Efrat, IL (Israel)
Gref, Ruxandra, Nancy, FR (France)
Minamitake, Yoshiharu, Ota, JP (Japan)
Peracchia, Maria T., Parma, IT (Italy)
Langer, Robert S., Newton, MA (Massachusettes), US (United States of America)
ASSIGNEE(s): Massachusetts Institute of Technology, (A U.S. Company or Corporation), Cambridge, MA (Massachusetts), US (United States of America)
[Assignee Code(s): 52912]
APPL. NO.: 8-265,440
FILED: June 24, 1994 (19940624)
The present application is a continuation-in-part of U.S. Ser. No. 08-210,677, "Biodegradable Injectable Particles for Imaging," filed Mar. 18, 1994, by Ruxandra Gref, Yoshiharu Minamitake and Robert S. Langer, which is a continuation-in-part of U.S. Ser. No. 08-096,370, "Biodegradable

Microparticles and Injectable Nanoparticles" filed June 23, 1993, by Ruxandra Gref. Yoshiharu Minamitake and Robert S. Langer, the contents of which are hereby incorporated by reference.

This invention was made with government support under Grant Number NIH-1R01-GM44884 awarded by the National Institutes of Health. The government has certain rights in the invention.

FULL TEXT: 1133 lines

ABSTRACT

Injectable particles are provided that are not rapidly cleared from the blood stream by the macrophages of the reticuloendothelial system, and that can be modified as necessary to achieve variable release rates or to target specific cells or organs as desired. The injectable particles can include magnetic particles or radiopaque materials for diagnostic imaging, biologically active molecules to be delivered to a site, or compounds for targeting the particles. Biodistribution experiments indicate that the injectable particles have a prolonged half-life in the blood compared to particles not containing poly(alkylene glycol) moieties on the surface.

41/3,AB/39 (Item 11 from file: 654)
DIALOG(R)File 654:US PAT.FULL.

02507722
Utility
METHOD FOR MAKING HYDROPHOBIC POLYMERIC **MICROPARTICLES**
[Protein drug delivery]

PATENT NO.: 5,500,161
ISSUED: March 19, 1996 (19960319)
INVENTOR(s): Andrianov, Alexander K., Belmont, MA (Massachusettes), US (United States of America)
Langer, Robert S., Newton, MA (Massachusettes), US (United States of America)
ASSIGNEE(s): Massachusetts Institute of Technology and Virus Research Institute, (A U.S. Company or Corporation), Cambridge, MA (Massachusetts), US (United States of America)
[Assignee Code(s): 38169; 52912]
EXTRA INFO: Assignment transaction [Reassigned], recorded August 6, 2001 (20010806)
Assignment transaction [Reassigned], recorded September 4, 2001 (20010904)
Assignment transaction [Reassigned], recorded April 22, 1996 (19960422)
APPL. NO.: 8-124,816
FILED: September 21, 1993 (19930921)

FULL TEXT: 657 lines

ABSTRACT

A method for the preparation of **microparticles** , and the product thereof, that includes dispersing a substantially water insoluble non-ionic or ionic polymer in an aqueous solution in which the substance to be delivered is also dissolved, dispersed or suspended, and then coagulating the polymer together with the substance by impact forces to form a **microparticle** . In an alternative embodiment, the **microparticle** is formed by coagulation of an aqueous polymeric dispersion through the use of electrolytes, pH changes, organic solvents in low concentrations (the minimal amount

necessary to break up the dispersion), or temperature changes to form polymer matrices encapsulating biological materials.
?

59/3,AB/3 (Item 2 from File: 73)
DIALOG(R)File 73:EMBASE

04915275 EMBASE No: 1992055490

Native but not denatured recombinant human immunodeficiency virus type 1 gp120 generates broad-spectrum neutralizing antibodies in baboons

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Chiron Corporation, 4560 Horton Street,Emeryville, CA 94608-2916 United States

Journal of Virology (J. VIROL.) (United States) 1992, 66/1 (172-182)
CODEN: JOVIA ISSN: 0022-538X
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

The protection of individuals from human immunodeficiency virus type 1 (**HIV** -1) infection with an envelope subunit derived from a single isolate will require the presentation of conserved epitopes in **gp120** . The objective of the studies presented here was to test whether a native recombinant **gp120** (rgp120) immunogen would elicit responses to conserved neutralization epitopes that are not present in a denatured recombinant **gp120** antigen from the same virus isolate. In a large study of 51 baboons, we have generated heterologous neutralizing activity with native, glycosylated rgp120(SF2) but not with denatured, nonglycosylated env 2-3(SF2). After repeated exposure to rgp120(SF2) formulated with one of several adjuvants, virus isolates from the United States, the Caribbean, and Africa were neutralized. The timing of the immunization regimen and the choice of adjuvant affected the virus neutralization titers both quantitatively and qualitatively. These results suggest that vaccination with native, glycosylated rgp120 from a single virus isolate, **HIV** -SF2, may elicit a protective immune response effective against geographically and sequentially distinct **HIV** -1 isolates.
?

61/3,AB/1 **(Item 1 from file: 5)**
DIALOG(R)File 5:Biosis Previews(R)

11005259 BIOSIS NO.: 199799626404
Antiretroviral DNA **vaccine controlled release system from** Poly **(D,** L - lactide **-co-** glycolide) microparticles **against** HIV **-1.**
AUTHOR: Hsu Yung-Yueh(a); Rasmussen Robert A; Trantolo Debra J(a); Gresser Joseph D(a); Wise Donald L
AUTHOR ADDRESS: (a)Cambridge Sci. Inc., Camdridge, MA**USA
JOURNAL: Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology 14 (4):pA30 1997
CONFERENCE/MEETING: National AIDS Malignancy Conference Bethesda, Maryland, USA April 28-30, 1997
ISSN: 1077-9450
RECORD TYPE: Citation
LANGUAGE: English
1997

61/3,AB/2 **(Item 1 from file: 266)**
DIALOG(R)File 266:FEDRIP

00294769
IDENTIFYING NO.: 5R21AI48370-02 AGENCY CODE: CRISP
MUCOSAL IMMUNITY TO HIV **ENV BY ORAL VACCINATION**
PRINCIPAL INVESTIGATOR: KOZBOR, DANUTA
ADDRESS: TEMPLE UNIVERSITY 1900 N 12TH ST ROOM 203 PHILADELPHIA, PA 19122-6078
PERFORMING ORG.: TEMPLE UNIVERSITY, PHILADELPHIA, PENNSYLVANIA
SPONSORING ORG.: NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES
FY : 2001
SUMMARY: DESCRIPTION: (Adapted from Applicant's Abstract) Accumulating evidence suggests that a combined regimen of immunization, in which a non-viral vector such as a **DNA** vaccine is given, followed by a viral vector such as vaccinia virus, results in robust CTL and CD4 T cell responses in mice and non-human primates. An important area of induction of cellular immunity to **HIV** that has not been much studied is the ability to induce CTL and humoral responses at mucosal surfaces. Yet, since most exposure to **HIV** occurs via mucosal surfaces, a successful prophylactic vaccine against **HIV** is likely to require a mucosal component. In these studies, we are seeking to define prime/boost strategies for the induction of high levels of mucosal immunity to **HIV** envelope (env) glycoprotein. We propose to explore the possibility of using **poly** (DL- **lactide** -co- **glycolide**) (PLG) **microparticles** as vehicles for oral vaccination with plasmid **DNA** encoding gp160 in combination with recombinant viral vectors expressing the env gene products to enhance the antigen-specific mucosal and systemic immunity. The recombinant viruses used in these studies will include a replication-attenuated modified vaccinia virus Ankara (MVA), adeno-associated virus (AAV), and the E1/E3-deleted adenoviral (Ad) vector. The live vectors will be associated with liposomes for protection against gastric environment, increased transduction and vector dissemination in vivo. The overall goal of this effort is to derive ways to maximize the immunogenicity and safety of the **HIV** vaccine by inducing long-lasting protective immunity to the **HIV** env in mucosal and systemic sites. Furthermore, because systemic immunization with **DNA** plasmid or vaccinia virus does not induce antigen-specific immunity in mucosal tissues, the inductive sites of the mucosal immune system may still be naive to the live vectors delivered by oral vaccination. We hypothesize that oral vaccination with PLG-encapsulated **DNA** plasmid and liposome-associated non-replicating viral vectors expressing gp160 will augment the magnitude of immune responses to **HIV** env in mucosal and systemic tissues, and help to overcome the problem of preexisting immunity to the live vectors. The following specific aims will be pursued: i) to evaluate levels of

env-specific cellular and humoral responses in systemic and mucosal tissues (Peyer's patches and lamina propria) of gastrointestinal track after oral vaccination with a) PLG-encapsulated **DNA** plasmid encoding gp160, b) liposome-associated recombinant viral vectors expressing gp160, and c) a combination of PLG-encapsulated **DNA** plasmid and liposome-associated viral vectors expressing the env glycoprotein; ii) to determine whether oral vaccination overcomes the barrier to recombinant vaccinia or adenovirus immunization caused by preexisting immunity to these pathogens, and whether multiple oral immunizations with liposome-associated AAV-env enhance gp160-specific immunity; and iii) to analyze levels of protection in mucosal tissues induced by the oral vaccination against intrarectal challenge with recombinant vaccinia virus expressing gp160.

61/3,AB/3 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00448819
ENCAPSULATION PROCESS
EINKAPSELUNGSVERFAHREN
PROCEDE D'ENCAPSULATION
PATENT ASSIGNEE:
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PATENT (CC, No, Kind, Date): EP 471036 A1 920219 (Basic)
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EP 471036 B1 960117
WO 9013361 901115
APPLICATION (CC, No, Date): EP 90908830 900502; WO 90US2439 900502
PRIORITY (CC, No, Date): US 347476 890504
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: B01J-013/12; A61K-009/58; A61K-009/52;
NOTE:
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LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB96	1294
CLAIMS B	(German)	EPAB96	1248
CLAIMS B	(French)	EPAB96	1404
SPEC B	(English)	EPAB96	5378
Total word count - document A			0
Total word count - document B			9324
Total word count - documents A + B			9324

61/3,AB/4 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00408640
METHODS AND COMPOSITIONS FOR ENHANCING THE BIOADHESIVE PROPERTIES OF POLYMERS USING ORGANIC EXCIPIENTS
PROCEDES ET COMPOSITIONS UTILISANT DES EXCIPIENTS ORGANIQUES POUR RENFORCER LES PROPRIETES BIOADHESIVES DE POLYMERES
Patent Applicant/Assignee:
BROWN UNIVERSITY RESEARCH FOUNDATION,
Inventor(s):

SANTOS Camilla A,
JACOB Jules S,
HERTZOG Benjamin A,
CARINO Gerardo P,
MATHIOWITZ Edith,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9749385 A1 19971231
Application: WO 97US10256 19970612 (PCT/WO US9710256)
Priority Application: US 96326 19960625
Designated States: JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 13937
English Abstract

Methods and compositions are provided for enhancing the bioadhesive properties of polymers used in drug delivery systems. The bioadhesive properties of a polymer are enhanced by incorporating an anhydride oligomer into the polymer to enhance the ability of the polymer to adhere to a tissue surface such as a mucosal membrane. Anhydride oligomers which enhance the bioadhesive properties of a polymer include oligomers synthesized from dicarboxylic acid monomers, preferably those found in Krebs glycolysis cycle, especially fumaric acid. The oligomers can be incorporated within a wide range of polymers including proteins, polysaccharides and synthetic biocompatible polymers. In one embodiment, anhydride oligomers can be incorporated within polymers used to form or coat drug delivery systems, such as microspheres, which contain a drug or diagnostic agent. The oligomers can either be solubilized and blended with the polymer before manufacture or else used as a coating with polymers over existing systems. The polymers, for example in the form of microspheres, have improved ability to adhere to mucosal membranes, and thus can be used to deliver a drug or diagnostic agent via any of a range of mucosal membrane surfaces including those of the gastrointestinal, respiratory, excretory and reproductive tracts.

French Abstract

La presente invention concerne des procedes et compositions permettant de renforcer les proprietes bioadhesives de polymeres utilises dans les systemes d'administration de medicaments. En incorporant un oligomere d'anhydride dans le polymere on renforce ses proprietes bioadhesives ce qui fait que ce polymere adhere plus facilement a la surface d'un tissu tel qu'une membrane de muqueuse. Parmi les oligomeres d'anhydrides qui renforcent les proprietes bioadhesives d'un polymere, on trouve des oligomeres synthetises a partir de monomeres d'acide dicarboxylique, de preference les monomeres que l'on trouve dans le cycle de glycolyse de Krebs, et notamment l'acide fumarique. Ces oligomeres peuvent s'incorporer dans une large gamme de polymeres, y compris des proteines, des polyosides et des polymeres biocompatibles synthetiques. Selon une realisation, les oligomeres d'anhydrides peuvent s'incorporer dans des polymeres utilises pour former ou enrober les systemes d'administration de medicaments, tels que les microspheres, qui contiennent un medicament ou un agent de diagnostic. De tels polymeres, par exemple ceux qui se trouvent sous forme de microspheres, sont plus aptes a adherer aux membranes des muqueuses. Ils conviennent donc a l'administration d'un medicament ou d'un agent de diagnostic via diverses surfaces de membranes de muqueuses, et notamment celles des voies gastro-intestinales, respiratoires, excretrices et genitales.

61/3,AB/9 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00376320
MICROENCAPSULATED DNA **FOR VACCINATION AND GENE THERAPY**
ADN MICROENCAPSULE S'APPLIQUANT DANS DES PROCEDES DE VACCINATION ET DE THERAPIE GENIQUE
Patent Applicant/Assignee:

MICROBIOLOGICAL RESEARCH AUTHORITY CAMR (CENTRE FOR APPLIED MICROBIOLOGY & RESEARCH),
FARRAR Graham Henry,
JONES David Hugh,
CLEGG James Christopher Stephen,
Inventor(s):
FARRAR Graham Henry,
JONES David Hugh,
CLEGG James Christopher Stephen,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9717063 A1 19970515
Application: WO 96GB2770 19961111 (PCT/WO GB9602770)
Priority Application: GB 9523019 19951109; GB 961929 19960131
Designated States: AU CA JP US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 8386

English Abstract
A **microparticle** contains **DNA** coding for a polypeptide and oral administration of the **microparticle** leads to its expression. **DNA** coding for an immunogen is for stimulating antibody formation in a recipient and **DNA** coding for a non-immunogenic polypeptide is for gene therapy applications. **DNA** is incorporated into the **microparticle** without destruction of its function.

French Abstract
L'invention se rapporte a une microparticule contenant de l'ADN codant pour un polypeptide et l'administration par voie orale de cette microparticule qui conduit a son expression. L'ADN codant pour un immunogene est destine a stimuler la formation d'anticorps chez un receveur, et l'ADN codant pour un polypeptide non-immunogene est destine a etre applique en therapie genique. L'ADN est introduit dans la microparticule sans destruction de sa fonction.

61/3,AB/14 (Item 11 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00338219
DIRECT ADMINISTRATION OF GENE DELIVERY VEHICLES AT MULTIPLE SITES
ADMINISTRATION DIRECTE EN PLUSIEURS SITES DE VEHICULES DISTRIBUTEURS DE GENES
Patent Applicant/Assignee:
CHIRON VIAGENE INC,
Inventor(s):
IRWIN Michael J,
WARNER John F,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9620731 A1 19960711
Application: WO 95US16471 19951215 (PCT/WO US9516471)
Priority Application: US 94366784 19941230
Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG UZ VN KE LS MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 16955

English Abstract
Methods of stimulating an immune response, either humoral or cell-mediated, in a warm-blooded animal through the administration at multiple sites of one or more gene delivery vehicles is provided. Each of the gene delivery vehicles directs the expression of at least one substance in host cells modified with the vehicle, such that an immune

response is generated. Within preferred embodiments, the expressed substance elicits a cell-mediated immune response, preferably an HLA Class I-restricted immune response.

French Abstract
Methodes de stimulation d'une reponse immunitaire humorale ou cellulaire chez un animal a sang chaud par administration en plusieurs sites d'un ou plusieurs vehicules distributeurs de genes. Chacun de ces vehicules dirige l'expression d'au moins une substance dans des cellules hotes modifiees avec le vehicule de maniere a provoquer une reponse immunitaire. Dans les variantes preferees, la substance exprimee emet une reponse immunitaire induite par la cellule et de preference une reponse immunitaire par HLA restreinte a la categorie I.

61/3,AB/16 (Item 13 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00306777
POLYMERIC GENE DELIVERY SYSTEM
SYSTEME DE LIBERATION DE GENES POLYMERES
Patent Applicant/Assignee:
BROWN UNIVERSITY RESEARCH FOUNDATION,
Inventor(s):
MATHIOWITZ Edith,
JONG Yong Shik,
BOEKELHEIDE Kim,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9524929 A2 19950921
Application: WO 95US3307 19950315 (PCT/WO US9503307)
Priority Application: US 94668 19940315
Designated States: AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 9650

English Abstract
A means for obtaining efficient introduction of exogenous genes into a patient, with long term expression of the gene, is disclosed. The gene, under control of an appropriate promoter for expression in a particular cell type, is encapsulated or dispersed with a biocompatible, preferably biodegradable polymeric matrix, where the gene is able to diffuse out of the matrix over an extended period of time, for example, a period of three to twelve months or longer. The matrix is preferably in the form of a **microparticle** such as a microsphere (where the gene is dispersed throughout a solid polymeric matrix) or microcapsule (gene is stored in the core of a polymeric shell), a film, an implant, or a coating on a device such as a stent. The size and composition of the polymeric device is selected to result in favorable release kinetics in tissue. The size is also selected according to the method of delivery which is to be used, typically injection or administration of a suspension by aerosol into the nasal and/or pulmonary areas. The matrix composition can be selected to not only have favorable degradation rates, but to be formed of a material which is bioadhesive, to further increase the effectiveness of transfer when administered to a mucosal surface.

French Abstract
L'invention concerne un moyen efficace d'assurer l'introduction de genes exogenes dans un patient, avec une expression prolongee du gene. Le gene, sous le controle d'un promoteur approprie pour l'expression dans un type de cellule particulier, est encapsule ou disperse dans une matrice polymere biocompatibloe de preference biodegradable de laquelle le gene peut etre diffuse sur une periode prolongee, par exemple, une periode de trois a douze mois. La matrice se presente, de preference, sous la forme d'une microparticule telle qu'une microbille (ou les genes sont disperses dans une matrice polymere solide) ou de microcapsule (le gene est stocke

dans le noyau d'une coquille polymere), de film, d'implant ou de revetement sur un dispositif tel qu'un drain. La taille et la composition du dispositif polymere sont selectionnees de sorte qu'une cinetique de liberation avantageuse soit obtenue dans le tissu. La taille est egalement choisie selon la methode de liberation a utiliser, generalement l'injection ou l'administration d'une suspension par un aerosol dans les regions nasales et/ou pulmonaires. On peut selectionner la composition de la matrice non seulement afin d'obtenir des vitesses de degradation rapides avantageuses, mais egalement afin de permettre la formation d'un materiau bioadhesif et d'augmenter encore l'efficacite du transfert lorsque ce dernier est applique sur une surface muqueuse.

61/3,AB/17 (Item 14 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00285208
BIODEGRADABLE PARTICLES
PARTICULES BIODEGRADABLES
Patent Applicant/Assignee:
MASSACHUSETTS INSTITUTE OF TECHNOLOGY,
Inventor(s):
GREF Ruxandra,
MINAMITAKE Yoshiharu,
LANGER Robert S,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9503357 A1 19950202
Application: WO 94US8416 19940722 (PCT/WO US9408416)
Priority Application: US 93370 19930723; US 94677 19940318
Designated States: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 10890

English Abstract
Particles are provided that are not rapidly cleared from the blood stream by the macrophages of the reticuloendothelial system, and that can be modified to achieve variable release rates or to target specific cells or organs. The particles have a biodegradable solid core containing a biologically active material and poly(alkylene glycol) moieties on the surface. The terminal hydroxyl group of the poly(alkylene glycol) can be used to covalently attach onto the surface of the particles biologically active molecules, including antibodies targeted to specific cells or organs, or molecules affecting the charge, lipophilicity or hydrophilicity of the particle. The surface of the particle can also be modified by attaching biodegradable polymers of the same structure as those forming the core of the particles. The typical size of the particles is between 1 nm and 1000 nm, preferably between 1 nm and 100 nm, although **microparticles** can also be formed as described herein. The particles can include magnetic particles or radiopaque materials, such as air and other gases, for diagnostic imaging, biologically active molecules to be delivered to a site, or compounds for targeting the particles. The particles have a prolonged half-life in the blood compared to particles not containing poly(alkylene glycol) moieties on the surface.

French Abstract
L'invention porte sur des particules qui ne sont pas rapidement eliminees du flux sanguin par les macrophages du systeme reticuloendothelial, et qui peuvent etre modifiees pour obtenir des taux de liberation variables ou pour viser des cellules ou organes specifiques. Les particles ont un noyau solide biodegradable contenant de la matiere biologiquement active et des fractions de poly(alkylene glycol) sur sa surface. Le groupe hydroxyle terminal du poly(alkylene glycol) permet la liaison covalente des molecules biologiquement actives sur la surface des particules, mais aussi des anticorps ayant pour cible

des cellules ou organes spécifiques, ou des molecules affectant la charge, la lipophilie ou l'hydrophilie de la particule. Il est aussi possible de modifier la surface de la particule en fixant des polymeres biodegradables de la meme structure que ceux qui constituent le coeur des particules. La taille type des particules est comprise entre 1 nm et 1000 nm, generalement entre 1 nm et 100 nm, encore que des microparticules peuvent aussi se constituer selon le processus decrit ci-dessus. Parmi les particules en question peuvent figurer des particules magnetiques ou des matieres radiopaques telles que l'air et d'autres gaz, utilisables pour l'imagerie diagnostique, des molecules biologiquement actives a delivrer sur un site, ou des composes ayant ces particules pour cible. Ces particules ont une demi-vie dans le sang prolongee par rapport aux particules ne comportant pas de fractions poly(alkylene glycol) en surface.

61/3,AB/29 (Item 8 from file: 654)

02404782

Utility
MICROENCAPSULATION PROCESS AND PRODUCTS THEREFROM
[Emulsification, solvent extraction]

PATENT NO.: 5,407,609
ISSUED: April 18, 1995 (19950418)
INVENTOR(s): Tice, Thomas R., Birmingham, AL (Alabama), US (United States of America)
Gilley, Richard M., Birmingham, AL (Alabama), US (United States of America)
ASSIGNEE(s): Southern Research Institute, (A U.S. Company or Corporation), Birmingham, AL (Alabama), US (United States of America)
[Assignee Code(s): 78536]
APPL. NO.: 8-62,696
FILED: May 17, 1993 (19930517)

This application is a continuation of application Ser. No. 07-347,476, filed May 4, 1989, now abandoned.

FULL TEXT: 870 lines

ABSTRACT

A method of microencapsulating an agent to form a microencapsulated product, having the steps of dispersing an effective amount of the agent in a solvent containing a dissolved wall forming material to form a dispersion, combining the dispersion with an effective amount of a continuous process medium to form an emulsion that contains the process medium and microdroplets having the agent, the solvent and the wall forming material and adding rapidly the emulsion to an effective amount of an extraction medium to extract the solvent from the microdroplets to form the microencapsulated product.
?

Detailed Description
Claims
Fulltext Word Count: 8845
Publication Year: 1994

68/6/10 (Item 1 from file: 654)
02588776
GELS FOR ENCAPSULATION OF BIOLOGICAL MATERIALS
[Photopolymerization of acrylated resin, initiator]
FULL TEXT: 2046 lines

68/6/11 (Item 2 from file: 654)
02586181
MICROPARTICLE DELIVERY SYSTEM WITH A FUNCTIONALIZED SILICONE BONDED TO THE MATRIX
FULL TEXT: 878 lines

68/6/12 (Item 3 from file: 654)
02567679
METHOD AND KIT FOR MAKING A POLYSACCHARIDE-PROTEIN CONJUGATE
[Vaccines]
FULL TEXT: 461 lines

68/6/13 (Item 4 from file: 654)
02552614
VISCOUS SUSPENSIONS OF CONTROLLED-RELEASE DRUG PARTICLES
FULL TEXT: 643 lines

68/6/14 (Item 5 from file: 654)
02540410
HYDROGEL MICROENCAPSULATED VACCINES
[Mucosally administering a polyphosphazene polymer and antigen]
FULL TEXT: 1385 lines
?t s68/3,ab/1,2,3,5,8
>>>No matching display code(s) found in file(s): 65, 123, 342, 345, 447, 670

68/3,AB/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09445198 BIOSIS NO.: 199497453568
The immunogenicity of a model protein entrapped in poly(lactide-co-glycolide) microparticles prepared by a novel phase separation technique.
AUTHOR: McGee J P; Davis S S; O'Hagan D T(a)
AUTHOR ADDRESS: (a)Dep. Pharm. Sci., Univ. Nottingham, Nottingham NG7 2RD** UK
JOURNAL: Journal of Controlled Release 31 (1):p55-60 1994
ISSN: 0168-3659
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: A novel phase separation technique was used to prepare poly (lactide-co-glycolide) microparticles with an entrapped model protein, ovalbumin (OVA). In an in vitro release study, the entrapped OVA showed controlled release from the microparticles over about 10 to 15 days. Following subcutaneous (s.c.) immunization in mice, the microparticles induced a serum IgG antibody response that was significantly enhanced in comparison to the response induced by soluble OVA and was comparable to

the response induced by OVA adsorbed to an aluminium hydroxide adjuvant. The microparticles were also immunogenic by the oral route in mice and induced a serum IgG antibody response that was half the maximal response induced by s.c. immunization with OVA adsorbed to the adjuvant.

1994

68/3,AB/2 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

01878848 Genuine Article#: JH930 Number of References: 33
Title: BIODEGRADABLE POLY(DL-LACTIDE-CO-GLYCOLIDE) MICROSPHERES
Author(s): ELDRIDGE JH; STAAS JK; TICE TR; GILLEY RM
Corporate Source: UNIV ALABAMA,DEPT MED,UNIV STN/BIRMINGHAM//AL/35294; SO RES INST,DIV CONTROLLED RELEASE/BIRMINGHAM//AL/35205; UNIV ALABAMA,DEPT MICROBIOL/BIRMINGHAM//AL/35294
Journal: RESEARCH IN IMMUNOLOGY, 1992, V143, N5 (JUN), P557-563
Language: ENGLISH Document Type: ARTICLE

68/3,AB/3 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00337500
METHODS FOR PREPARING AND PURIFYING MACROMOLECULAR CONJUGATES
PROCEDES DE PREPARATION ET DE PURIFICATION DE CONJUGUES MACROMOLECULAIRES
Patent Applicant/Assignee:
MIDDLESEX SCIENCES INC,
Inventor(s):
DI Jie,
WOISZWILLO James E,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9620012 A2 19960704
Application: WO 95US16950 19951222 (PCT/WO US9516950)
Priority Application: US 94372820 19941223; US 95538817 19951004
Designated States: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 15988

English Abstract
Methods for the preparation and purification of conjugates by reacting a molecule containing an aldehyde group with a molecule containing an amine group in the presence of a polymer for a sufficient amount of time to form conjugate particles. Conjugates are prepared rapidly and efficiently by oxidizing the aldehyde and combining the oxidized aldehyde with a protein and polymer solution to form Schiff base intermediate conjugate particles in the absence of reductive amination. Subsequent separation of the particles from the conjugation reaction mixture yields purified conjugates that have been separated from the free, unconjugated components. Most preferably, the polymer is a polymer mixture comprising polyvinylpyrrolidone and polyethylene glycol. An organic solvent, such as an alcohol may be added to the incubation mixture to facilitate particle formation. A conjugating agent may also be included in the reaction mixture. The particles may be washed for removal of additional undesired contaminants and solubilized with a base, yielding soluble conjugates. Conjugates prepared from one or more antigens are suitable for use as a vaccine when administered to humans or animals.

French Abstract
Procedes de preparation et de purification de conjugues par reaction d'une molecule contenant un groupe aldehyde avec une molecule contenant un groupe amine en presence d'un polymere pendant une duree suffisante pour obtenir des particules de conjugues. On prepare les conjugues

rapidement et efficacement par oxydation de l'aldehyde et par combinaison de l'aldehyde oxyde avec une solution a base de proteines et de polymere, afin d'obtenir des particules de conjugues intermediaires de base de Schiff en l'absence d'une animation reductrice. La separation subsequente des particules du melange reactionnel de conjugaison permet d'obtenir des conjugues purifies qu'on a separe des constituants libres non conjugues. De preference, le polymere est un melange de polymeres comprenant polyvinylpyrrolidone et polyethylene glycol. On peut ajouter un solvant organique, tel qu'un alcool, au melange d'incubation, afin de faciliter la formation des particules. On peut egalement ajouter un agent de conjugaison au melange reactionnel. On peut laver les particules afin de supprimer les contaminants supplementaires indesirables et les solubiliser au moyen d'une base, ce qui produit des conjugues solubles. Les conjugues prepares a partir d'un ou plusieurs antigenes sont utiles en tant que vaccins quand on les administre a l'homme ou a l'animal.

68/3,AB/5 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00313034
MICROPARTICLE DELIVERY SYSTEM
SYSTEME DE LIBERATION DE MICROPARTICULES
Patent Applicant/Assignee:
McMASTER UNIVERSITY,
McDERMOTT Mark R,
BROOK Michael A,
HERITAGE Philippa L,
UNDERDOWN Brian J,
LOOMES Lesley M,
JIANG Jianxiong,
Inventor(s):
McDERMOTT Mark R,
BROOK Michael A,
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LOOMES Lesley M,
JIANG Jianxiong,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9531187 A1 19951123
Application: WO 95CA294 19950518 (PCT/WO CA9500294)
Priority Application: US 94245646 19940518
Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SI SK TJ TT UA US UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 9729

English Abstract
A particulate carrier for an agent comprising a solid core of a polysaccharide and a proteinaceous material and an organometallic polymer bonded to the core is provided. The agent has a biological activity, such as immunogenicity, and may comprise the proteinaceous material or be a separate component of the core. Polysaccharide cores include dextran, starch, cellulose and derivatives thereof and the organometallic polymer includes silicones including substituted silicones. The particulate carriers are useful for delivering agents to the immune system of a subject by mucosal or parenteral administration to produce immune responses, including antibody responses.

French Abstract
L'invention concerne un excipient particulaire destine a un agent comprenant un noyau solide d'un polysaccharide et une matiere proteique, ainsi qu'un polymere organometallique lie au noyau. Cet agent presente

une activite biologique, par exemple une immunogenicite, peut comprendre la matiere proteique ou etre un constituant separe du noyau. Les noyaux de polysaccharide comprennent le dextrane, l'amidon, la cellulose et ses derives. Le polymere organometallique comprend les silicones, y compris les silicones substituees. Ces excipients particulaires sont utiles pour la liberation d'agents vers le systeme immunitaire d'un sujet, par les muqueuses ou par voie parenterale, dans le but de provoquer des reponses immunitaires, y compris la production d'anticorps.

68/3,AB/8 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00267465
INDUCING CYTOTOXIC T LYMPHOCYTE RESPONSES
PROCEDE PERMETTANT D'INDUIRE DES REPONSES DE LYMPHOCYTES-T CYTOTOXIQUES
Patent Applicant/Assignee:
DANA-FARBER CANCER INSTITUTE,
ROCK Kenneth,
Inventor(s):
ROCK Kenneth,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9415635 A1 19940721
Application: WO 94US362 19940110 (PCT/WO US9400362)
Priority Application: US 933233 19930111
Designated States: AU CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 13292

English Abstract
The invention provides compositions and methods for inducing MHC class I-restricted cytotoxic T lymphocyte responses in a mammalian host by immunization with non-replicating protein antigens. The compositions of the invention comprise a particulate-protein complex capable of inducing a class I-restricted CTL response to a protein antigen in a mammal, in which the particulate protein complex comprises a particulate component having an average diameter ranging in size from about .5mum to about 6mum, linked to a non-replicating protein antigen derived from a tumor cell or from pathogenic organism where CTL response is likely to play an important role in conferring protective immunity in a mammal, with the proviso that the particulate component is not a prokaryotic or eukaryotic cell, or a micellar, multimicellar, or liposome vesicle composed of detergents or lipids. The non-replicating protein antigen is attached to the particle component through a covalent or non-covalent association to form particulate protein antigen complexes and the complexes are administered to a mammalian host in conjunction with a pharmaceutically acceptable excipient, in a CTL-stimulatory amount. The invention also provides non-replicating vaccines and methods of vaccinating a mammalian host against pathogenic diseases or tumors for CTL immunity.

French Abstract
L'invention se rapporte a des compositions et a des procedes permettant d'induire des reponses de lymphocytes-T cytotoxiques (CTL) restreints par le complexe majeur d'histocompatibilite (CMH) de classe I, par immunisation avec des antigenes proteiques sans replication. Les compositions de l'invention comprennent un complexe substance-particulaire-proteine capable d'induire une reponse de CTK CMH-classe I-restreint par rapport a un antigene proteique chez un mammifere, ledit complexe comprenant un constituant particulaire presentant un diametre moyen compris entre environ 0,5 mum et environ 6mum, lie a un antigene proteique sans replication derive d'une cellule tumorale ou d'un organisme pathogene, lorsque la reponse de CTL sera apte a contribuer de facon importante a l'apparition d'une immunite

protectrice chez un mammifere, et a condition que le constituant particulaire ne soit pas une cellule procaryotique ou eucaryotique, ou une vesicule micellaire, multimicellaire ou liposomique composee de detergents ou de lipides. L'antigene proteique sans replication est fixe au constituant particulaire par une association covalente ou noncovalente pour former des complexes substance particulaire-antigene proteique, et les complexes sont administres a un mammifere-hote conjointement avec un excipient pharmaceutiquement acceptable, et en une dose stimulante par rapport aux CTL. L'invention se rapporte egalement a des vaccins sans replication et a des procedes de vaccination d'un mammifere-hote contre des maladies pathogenes ou des tumeurs et afin de lui conferer une immunite par CTL.

?

73/3,AB/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08423846 95169513 PMID: 7865332
Accell particle-mediated DNA immunization elicits humoral, cytotoxic, and protective immune responses.
Haynes JR; Fuller DH; Eisenbraun MD; Ford MJ; Pertmer TM
Agracetus, Inc., Middleton, Wisconsin 53562.
AIDS research and human retroviruses (UNITED STATES) 1994, 10 Suppl 2 pS43-5, ISSN 0889-2229 Journal Code: ART
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Record type: Completed
Accell particle-mediated gene delivery technology was employed for the intracellular delivery of antigen-encoding expression vectors in epidermal tissues in laboratory animals. Delivery of plasmid **DNA** -coated gold **microparticles** using the Accell gene delivery system resulted in de novo antigen expression in epidermal cells that stimulated the induction of antigen-specific humoral and cytotoxic cellular immune responses. Optimal **DNA** delivery conditions favoring maximal humoral responses required the delivery of 5 x 10(7) micron-sized gold particles containing 300 plasmid copies per particle (80 ng of vector total) into a 4-cm2 area of abdominal skin. Comparison of immune responses between animals that received intramuscular injections of relatively large quantities of vector **DNA** (100 micrograms) and those that received intracellular deliveries of submicrogram quantities of the same **DNA** to the epidermis demonstrated that the latter approach was considerably more effective at eliciting strong humoral responses. In addition, cytotoxic cellular immune responses were elicited to **HIV** -1 **gp120** following epidermal delivery of **HIV** -1 **gp160** or **gp120** expression constructs. A qualitative shift from predominantly cytotoxic cellular to predominantly humoral immune responses with continued immunization indicated the potential for optimizing delivery conditions to favor specifically one type of response over the other.

73/3,AB/2 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

03627079 Genuine Article#: PT118 Number of References: 8
Title: ACCELL(R) PARTICLE-MEDIATED DNA IMMUNIZATION ELICITS HUMORAL, CYTOTOXIC, AND PROTECTIVE IMMUNE-RESPONSES (Abstract Available)
Author(s): HAYNES JR; FULLER DH; EISENBRAUN MD; FORD MJ; PERTMER TM
Corporate Source: AGRACETUS INC,8520 UNIV GREEN/MIDDLETON//WI/53562
Journal: AIDS RESEARCH AND HUMAN RETROVIRUSES, 1994, V10, S2, PS43-S45
ISSN: 0889-2229
Language: ENGLISH Document Type: ARTICLE
Abstract: Accell(R) particle-mediated gene delivery technology was employed for the intracellular delivery of antigen-encoding expression vectors in epidermal tissues in laboratory animals. Delivery of plasmid **DNA** -coated gold **microparticles** using the Accell gene delivery system resulted in de novo antigen expression in epidermal cells that stimulated the induction of antigen-specific humoral and cytotoxic cellular immune responses. Optimal **DNA** delivery conditions favoring maximal humoral responses required the delivery of 5 x 10(7) micron-sized gold particles containing 300 plasmid copies per particle (80 ng of vector total) into a 4-cm(2) area of abdominal skin. Comparison of immune responses between animals that received intramuscular injections of relatively large quantities of vector **DNA** (100 mu g) and those that received intracellular deliveries of submicrogram quantities of the same **DNA** to the epidermis demonstrated that the latter approach was considerably more effective at eliciting strong humoral responses. In addition, cytotoxic cellular immune responses were elicited to **HIV** -1 **gp120** following epidermal delivery of **HIV** -1 **gp160** or **gp120** expression constructs. A qualitative

shift from predominantly cytotoxic cellular to predominantly humoral immune responses with continued immunization indicated the potential for optimizing delivery conditions to favor specifically one type of response over the other.

73/3,AB/3 (Item 1 from file: 76)
DIALOG(R)File 76:Life Sciences Collection

01891219 3699084
Accell registered particle-mediated DNA immunization elicits humoral, cytotoxic, and protective immune responses
Haynes, J.R.; Fuller, D.H.; Eisenbraun, M.D.; Ford, M.J.; Pertmer, T.M.
Agracetus, Inc., 8520 Univ. Green, Middleton, WI 53562, USA
AIDS RES. HUM. RETROVIRUSES vol. 10, no. 2 suppl., pp. S43-S45 (1994)
ISSN: 0889-2229
DOCUMENT TYPE: Journal article LANGUAGE: ENGLISH
SUBFILE: Virology & AIDS Abstracts

Accell registered particle-mediated gene delivery technology was employed for the intracellular delivery of antigen-encoding expression vectors in epidermal tissues in laboratory animals. Delivery of plasmid **DNA** -coated gold **microparticles** using the Accell gene delivery system resulted in de novo antigen expression in epidermal cells that stimulated the induction of antigen-specific humoral and cytotoxic cellular immune responses. Optimal **DNA** delivery conditions favoring maximal humoral responses required the delivery of 5 x 10 super(7) micron-sized gold particles containing 300 plasmid copies per particle (80 ng of vector total) into a 4-cm super(2) area of abdominal skin. Comparison of immune responses between animals that received intramuscular injections of relatively large quantities of vector **DNA** (100 mu g) and those that received intracellular deliveries of submicrogram quantities of the same **DNA** to the epidermis demonstrated that the latter approach was considerably more effective at eliciting strong humoral responses. In addition, cytotoxic cellular immune responses were elicited to **HIV** -1 **gp120** following epidermal delivery of **HIV** -1 **gp160** or **gp120** expression constructs. A qualitative shift from predominantly cytotoxic cellular to predominantly humoral immune responses with continued immunization indicated the potential for optimizing delivery conditions to favor specifically one type of response over the other.

73/3,AB/7 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00671556
Derivatives of gp160 and vaccines based on gp160 or a derivative thereof, containing an adjuvant.
GP160 **Derivate und Adjuvans enthaltende Impfstoffe auf Basis von** GP160 **oder dessen Derivate.**
Derives de gp160 **et vaccines a base de** gp160 **ou d'un de ses derives, contenant un adjuvant.**
PATENT ASSIGNEE:
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PATENT (CC, No, Kind, Date): EP 644201 A1 950322 (Basic)
APPLICATION (CC, No, Date): EP 94202409 910921;
PRIORITY (CC, No, Date): GB 9021175 900928; GB 9106048 910321
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE
RELATED PARENT NUMBER(S) - PN (AN):
EP 550485 (EP 919160671)
INTERNATIONAL PATENT CLASS: C07K-014/16; C12N-015/49; A61K-039/39; A61K-039/21;

ABSTRACT EP 644201 A1
This invention provides novel, substantially uncleavable forms of **gp 160** , and vaccine formulations containing **gp 160** or a derivative thereof, adjuvanted with 3-D Mpl. The compositions are useful for the immunotherapeutic and immunoprophylatic treatment of **HIV** infections.
ABSTRACT WORD COUNT: 39

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	246
SPEC A	(English)	EPAB95	6954
Total word count - document A			7200
Total word count - document B			0
Total word count - documents A + B			7200

73/3,AB/42 (Item 25 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00219322
DERIVATIVES OPF GP160 **AND VACCINES BASED ON** GP160 **OR A DERIVATIVE THEREOF, CONTAINING AN ADJUVANT**
DERIVES DE GP160 **ET VACCINS A BASE DE** GP160 **OU D'UN DE SES DERIVES CONTENANT UN ADJUVANT**
Patent Applicant/Assignee:
SMITHKLINE BEECHAM BIOLOGICALS (S A),
Inventor(s):
VAN WIJNENDALE Frans,
SLAOUI Moncef,
BRUCK Claudine,
FRANCOTTE Myriam,
KUMMERT Suzy,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9216556 A1 19921001
Application: WO 91EP2047 19911025 (PCT/WO EP9102047)
Priority Application: GB 916048 19910321
Designated States: BR CS FI HU NO PL
Publication Language: English
Fulltext Word Count: 8913
English Abstract
This invention provides novel, substantially uncleavable forms of **gp160** , and vaccine formulations containing **gp160** or a derivative thereof, adjuvanted with 3-D Mpl. The compositions are useful for the immunotherapeutic and immunoprophylactic treatment of **HIV** infections.

French Abstract
L'invention decrit de nouvelles formes de **GP160** , pratiquement indivisibles, ainsi que des formulations de vaccins contenant **GP160** ou un de ses derives, auxquelles on a ajoute un adjuvant, notamment 3-D Mpl.

Les compositions sont efficaces pour le traitement immunothérapeutique et immunoprophylactique des infections par **HIV** .

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89/3,AB/3 (Item 2 from File: 349)
DIALOG(R)File 349:PCT FULLTEXT

00256409

PEPTIDE INHIBITORS OF INFLAMMATION MEDIATED BY SELECTINS
INHIBITEURS PEPTIDIQUES D'INFLAMMATION PRESENTANT UNE MEDIATION PAR LES SELECTINES

Patent Applicant/Assignee:
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BOARD OF REGENTS OF THE UNIVERSITY OF OKLAHOMA,
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HEAVNER George A,
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KRUSZYNSKI Marian,
EPPS Leon A,
MERVIC Miljenko,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9404568 A1 19940303
Application: WO 92US10986 19921217 (PCT/WO US9210986)
Priority Application: US 91942 19911218
Designated States: AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 12413

English Abstract
Peptides derived from three regions of the lectin domain of GMP-140 (P-selectin) and the related selectins, ELAM-1 (E-selectin) and the lymphocyte homing receptor (L-selectin), have been found to inhibit neutrophil adhesion to GMP-140. These and additional peptides have been synthesized, having as their core region portions of the 74-76 amino acid sequence of GMP-140, with residue 1 defined as the N-terminus of the mature protein after the cleavage of the signal peptide. Examples demonstrate the inhibition of the binding of neutrophils to GMP-140 of peptides in concentrations ranging from 30 to 1500 mumol. It has been found that alterations within the core sequence, as well as N-terminal and C-terminal flanking regions, do not result in loss of biological activity. The peptides are useful as diagnostics and, in combination with a suitable pharmaceutical carrier, for clinical applications in the modulation or inhibition of coagulation processes or inflammatory processes.

French Abstract
On a decouvert que des peptides derives de trois regions du domaine lectine de GMP-140 (selectine P) et des selectines apparentees, ELAM-1 (selectine E) et le recepteur de guidage lymphocytaire (selectine L), inhibent l'adherence des neutrophiles a GMP-140. Ces peptides et d'autres ont ete synthetises et ils comportent en guise de region centrale des portions de la sequence d'acide amine 74-76 de GMP-140, le residu 1 etant defini comme le terminal N de la proteine mature apres coupure du peptide de signal. Des exemples demontrent l'inhibition de la liaison de neutrophiles avec GMP-140 par des peptides a des concentrations allant de 30 a 1500 mumol. On a decouvert que des modifications survenant dans la sequence centrale, ainsi que dans des regions adjacentes des terminaux N et C, n'entrainent aucune diminution d'activite biologique. Ces peptides sont utiles pour le diagnostic et, combines avec un vecteur pharmaceutique approprie, pour des applications cliniques concernant la modulation ou l'inhibition des processus de coagulation ou d'inflammation.
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87/3,AB/2 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00266667
PEPTIDE INHIBITORS OF SELECTIN BINDING
INHIBITEURS PEPTIDIQUES DE LIAISON DE SELECTINE
Patent Applicant/Assignee:
CENTOCOR INC,
HEAVNER George A,
KRUSZYNSKI Marian,
Inventor(s):
HEAVNER George A,
KRUSZYNSKI Marian,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9414836 A1 19940707
Application: WO 93US12110 19931213 (PCT/WO US9312110)
Priority Application: US 92771 19921218
Designated States: CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 13607

English Abstract
The present invention provides novel peptides having as their core region portions of the 109-118 amino acid sequence of P-selectin , E-selectin or L-selectin. The invention also provides pharmaceutical compositions comprising the peptides of the invention, and diagnostic and therapeutic methods utilizing the peptides and pharmaceutical compositions of the invention.

French Abstract
La presente invention se rapporte a de nouveaux peptides comprenant au niveau de leur region centrale des parties de la sequence d'aminoacides 109-118 de P-selectine, E-selectine ou L-selectine. L'invention se rapporte egalement a des compositions pharmaceutiques comprenant les peptides de l'invention, ainsi qu'a des procedes diagnostiques et therapeutiques consistant a utiliser les peptides et les compositions pharmaceutiques de l'invention.

87/3,AB/3 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00257150
PEPTIDE INHIBITORS OF CELLULAR ADHESION
INHIBITEURS PEPTIDIQUES D'ADHESION CELLULAIRE
Patent Applicant/Assignee:
CENTOCOR INC,
HEAVNER George A,
Inventor(s):
HEAVNER George A,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9405310 A1 19940317
Application: WO 93US8504 19930908 (PCT/WO US9308504)
Priority Application: US 92653 19920908
Designated States: CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 59995

English Abstract
Novel cyclic peptides of the selectin 54-63 sequence exhibit unexpected and desired properties. Specific points of cyclization or conformational restriction in conjunction with specific substitutions have been identified that not only unexpectedly enhance the biological activity of

these compounds, but also significantly increase their resistance to enzymatic degradation. Formulas of the active compounds and representative examples of preferred peptides are presented herein.

French Abstract
De nouveaux peptides cycliques de la sequence (54-63) de selectine presentent des proprietes inattendues et voulues. On a identifie des points specifiques de cyclisation ou de restriction de conformation conjointement avec des substitutions specifiques qui non seulement ameliorent de facon inattendue l'activite biologique de ces composes, mais egalement accroissent significativement leur resistance a la degradation enzymatique. L'invention concerne egalement des formules des composes actifs et des exemples representatifs de peptides preferes.

87/3,AB/4 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00250230
PEPTIDE INHIBITORS OF SELECTIN BINDING
PEPTIDES INHIBITEURS DE LA LIAISON DE SELECTINE
Patent Applicant/Assignee:
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Inventor(s):
HEAVNER George A,
RIEXINGER Douglas,
MERVIC Miljenko,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9324527 A1 19931209
Application: WO 93US3986 19930428 (PCT/WO US9303986)
Priority Application: US 92986 19920528
Designated States: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 11356

English Abstract
The present invention provides peptides comprising portions of the amino acid sequence at positions 58-61 of P-selectin. The invention also provides pharmaceutical compositions comprising the peptides of the invention, diagnostic and therapeutic methods utilizing the peptides and pharmaceutical compositions of the invention, and method of preparing the peptides and pharmaceutical compositions.

French Abstract
La presente invention se rapporte a des peptides comprenant des parties de la sequence d'acides amines aux positions 58-61 de la selectine P. L'invention se rapporte egalement a des compositions pharmaceutiques comprenant lesdits peptides, des procedes therapeutiques et de diagnostic utilisant les peptides et les compositions pharmaceutiques de l'invention, et un procede de preparation des peptides et des compositions pharmaceutiques.

87/3,AB/10 (Item 4 from file: 654)
DIALOG(R)File 654:US PAT.FULL.

02170042
Utility
FUNCTIONALLY ACTIVE SELECTIN-DERIVED PEPTIDES
[Polypeptide antiinflammatory agents or anticoagulants]

PATENT NO.: 5,198,424
ISSUED: March 30, 1993 (19930330)
INVENTOR(s): McEver, Rodger P., Oklahoma City, OK (Oklahoma), US (United

States of Ame[redacted]a)
ASSIGNEE(s): Board of Regents of the University of Oklahoma, (A U.S. Company or Corporation), Norman, OK (Oklahoma), US (United States of America)
[Assignee Code(s): 61802]
APPL. NO.: 7-867,271
FILED: April 07, 1992 (19920407)

This is a continuation of copending application Ser. No. 07-554,199 filed on Jul. 17, 1990 abandoned, which is a continuation-in-part of U.S. Ser. No. 07-320,408 entitled "Method for Modulation of Inflammatory Responses" filed Mar. 8, 1989 by Rodger P. McEver.

The U.S. Government has rights in this invention by virtues of grants from the National Heart, Lung and Blood Institute.

FULL TEXT: 1081 lines

ABSTRACT

Peptides derived from three regions of the lectin binding region of GMP-140 have been found to selectively interact with "selectins", including GMP-140, ELAM-1, and lymphocyte homing receptor. The peptides can be as short as eight to thirteen amino acids in length and are easily prepared and modified by standard techniques. Critical elements of the counter-receptor or ligand on the neutrophils which binds GMP-140 are also identified. The peptides are useful as diagnostics and

The U.S. Government has rights in this invention by virtues of grants from the National Heart, Lung and Blood Institute.
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